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Anti-HER2 (c-erbB-2), Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody
Catalog # ABV11828

Product Information

Application	WB, IHC
Primary Accession	P04626
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	137910

Additional Information

Gene ID	2064
Positive Control	WB: MCF-7, PC3, Jurkat, A375; IHC: human breast cancer tissue
Application & Usage	IHC: 1:100 dilution; WB: 1:1000 dilution
Alias Symbol	ERBB2
Other Names	Metastatic lymph node gene 19 protein, MLN 19, HER2, MLN19, NEU, NGL, ERBB2
Appearance	Colorless liquid
Formulation	In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-HER2 (c-erbB-2), Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

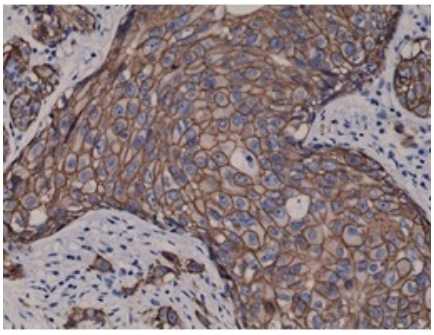
Name	ERBB2
Synonyms	HER2, MLN19, NEU, NGL
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This

	prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization.
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm. Nucleus.
Tissue Location	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

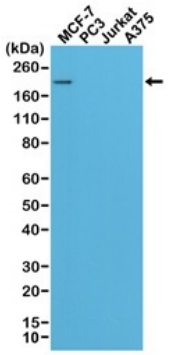
Background

HER2 gene encodes a cell-surface glycoprotein tyrosine kinase receptor with extensive homology to the epidermal growth factor receptor. HER2 is an oncogene and overexpression of unaltered HER2 coding sequences in NIH 3T3 cells results in cellular transformation and tumorigenesis. HER2 is amplified in about 30% of primary human breast malignancies and overexpression of HER2 is associated with the most aggressive tumors that show uncontrolled proliferation, resistance to apoptosis and increased motility.

Images



Immunohistochemical staining of formalin fixed and paraffin embedded H.breast cancer tissue sections using anti-HER2 (c-ErBb2) Rabbit Monoclonal antibody.



Western blot of MCF-7, PC-3, Jurkat and A375 cell lysates using HER2 monoclonal antibody, showed a band of HER2 expressed only in MCF-7 cells.